

**Course Outcomes Guide
Spring 2014**

Course/Program Title: PHR 102 Pharmaceutical Calculations

Date: 7/1/14

Spring 2014 Semester

Course/Program Team: Jessie Lindner

Expected Learning Outcomes:

1. Perform advanced mathematic skills essential to the duties of a pharmacy technician in different pharmacy settings ensuring accuracy and ability to prevent medication errors.

Assessment:

Course Completion: Number passing at 70% or greater.

Course Outcomes: Common Final Exam

CO#1	Medication Dispensing Quantity Calculation #41
	Percentage Error Calculation #45 Part A- C
	Dosage Calculation/IV Flow Rate Calculation #47 Part A and B
	Compounding Formula Adjustment Calculation #48
	Allegation Calculation #53
	Reconstitution of Medication/Dosage Adjustment Calculation #63 Part A-D
	Medication Release Rate Calculation # 64 Part A-D
	Percentage Strength Calculation #67
	Dosage Range Calculation #68 Part A-C
	Balance Sensitivity Calculation #74

Validation:

Course Completion:

Completion of course with an average grade of 70% or higher.

Course Outcome 1 Common Final Exam Questions: 75% will get correct answer

Results:

Course Completion:

72% (5/7 students) Completed the course with a grade of 70% or higher

28% (2/7 students) Completed the course with a grade of less than 70%. Of these, 1 was a “walk-away/no-show” F grade.

Course Outcomes: (Common Final Exam Questions) (Number assessed was 6)

Course Outcome #1: 75% will get correct answer

Medication Dispensing Quantity Calculation #41	100%
Percentage Error Calculation #45A	83.33%
Percentage Error Calculation #45B	83.33%
Percentage Error Calculation #45C	100%
Dosage Calculation/IV Flow Rate Calculation #47A	66.67%
Dosage Calculation/IV Flow Rate Calculation #47B	33.33%
Compounding Formula Adjustment Calculation #48	66.67%
Allegation Calculation #53	66.67%
Reconstitution of Medication/Dosage Adjustment Calculation #63A	50 %
Reconstitution of Medication/Dosage Adjustment Calculation #63B	66.67%
Reconstitution of Medication/Dosage Adjustment Calculation #63C	33.33%
Reconstitution of Medication/Dosage Adjustment Calculation #63D	33.33%
Medication Release Rate Calculation # 64A	100%
Medication Release Rate Calculation # 64B	100%
Medication Release Rate Calculation # 64C	100%
Medication Release Rate Calculation # 64D	66.67%
Percentage Strength Calculation #67	16.67%
Dosage Range Calculation #68A	66.67%
Dosage Range Calculation #68B	66.67%
Dosage Range Calculation #68C	50%
Balance Sensitivity Calculation #74	33.33%

Follow-up:

Students did not meet outcome regarding calculations of dosage amount, IV flow rate, compounding formula adjustment, allegation, reconstitution of medications, medication release rate, percentage strength, dosage range calculations and balance sensitivity formula.

Instructor will spend more lecture time on topics as well as provide class more time practicing example problems. Additional problems will be incorporated on topics in homework assignments and quizzes to monitor student understanding of material throughout semester.

Budget Justification:

None at this time.